

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A In a mobile computing network or subnetwork including at least one mobile computing device coupled to the network or subnetwork, said mobile computing device communicating with at least another computing device via a-said network or subnetwork, network point of attachment, including a policy-management arrangement comprising:

at least one computing device that applies-performs policy management rules that manages at least one of consumption of and access to a computer resource by at least one application, said computing resource available at least in part through the network or subnetwork;

wherein said policy management arrangement provides at least one of a rule and a control, on at least one of the at least another computing device and the at least one mobile computing device, that dynamically determines selectable levels of service based at least in part on various metrics including the mobile computing device's ability to communicate via said network or subnetwork\location, rules or at least another computing device at least one thatdetermines.

2. (currently amended) A network policy management arrangement as in claim 1 further comprising a distributed processing wherein said policy management arrangement

that distributes processing of attributes of policy management rules to at least one mobile computing device and/or the mobility management server.

3. (currently amended) A network policy management arrangement as in claim 1 further comprising a priority arrangement that prioritizes the policy management rules by position in the entry in such a policy table and/or explicit notation by an ordinal ensuring the expected behavior.

4. (currently amended) A network policy management arrangement as in claim 1 further comprising a datastore for the rule attributes that is locally or centrally administered via central management services.

5. (currently amended) A network policy management arrangement as in claim 1 further comprising an arrangement that modifies behavior of a particular application(s) based on a number of metrics parameters including cost of service, network point of attachment, and trust relationship.

6. (currently amended) A network policy management arrangement as in claim 1 wherein the effect of the behavior modification policy management is to dynamically allow, deny or delay a request based on attributes of the policy management rules.

7. (original) A policy management arrangement network as in claim 1 further comprising an arrangement that invokes a rule or set of rules to control or modify the application(s) processes even if after the application is already started.

8. (currently amended) A network policy management arrangement as in claim 1 further comprising point of presence location information (location) that is further used to

govern application(s) behavior at least one of consumption of and access to the computer resource and/or provide relevant information to the at least one mobile computing device or the at least another computing device.

9. (currently amended) A network policy management arrangement as in claim 1 further comprising an arrangement that uses rate of motion along with distance measurements to govern application(s) at least one of consumption of and access to the computer resource alter behavior of applications and/or the communication path.

10. (currently amended) A network policy management arrangement as in claim 4 further comprising an arrangement that extracts topological information as result of the location information.

11 (New). The policy management arrangement of claim 1 wherein said policy management arrangement performs per-user mobile policy management for managing consumption of at least one network resource.

12 (New). The policy management arrangement of claim 1 further including a component allowing a system administrator to centrally manage or control the at least one of consumption of and access to network resources by application(s) executing at at least one of the mobile device and the at least another computing device.

13 (New). The policy management arrangement of claim 12 further including a component that allows a system administrator to place policy management controls on at least one of the mobile computing device and the at least another computing device.

14 (New). The policy management arrangement of claim 1 wherein said policy management arrangement manages consumption of network bandwidth.

15 (New). The policy management arrangement of claim 1 wherein said policy management arrangement manages consumption of network resources.

16 (New). The policy management arrangement of claim 1 wherein said policy management arrangement provides security related controls.

17 (New). The policy management arrangement network of claim 1 wherein said policy management arrangement provides centralized administration of policy to be enforced.

18 (New). The policy management arrangement of claim 1 wherein said at least another computing device comprises a proxy server.

19 (New). The policy management arrangement of claim 1 wherein said at least another computing device proxies distinct data streams for mobile computing devices and thereby provides a central point from which to conduct policy management.

20 (New). The policy management arrangement of claim 1 wherein said at least another computing device controls and limits access to a computing resource on a per-user basis as well as on a per-device basis.

21 (New). The policy management arrangement of claim 1 wherein said policy management arrangement locks out certain users from accessing at least one computing resource.

22 (New). The policy management arrangement of claim 1 wherein said policy management arrangement interacts with users and controls particular web URL's said users can visit.

23 (New). The policy management arrangement of claim 1 wherein said policy management arrangement filters data associated with an application service request.

24 (New). The policy management arrangement of claim 1 wherein said at least one mobile device or said at least another computing device compresses application(s) data based at least in part on said rule or control.

25 (New). The policy management arrangement of claim 1 wherein said policy management arrangement enhances an application level service in a seamless manner.

26 (New). The policy management arrangement of claim 1 wherein said policy management arrangement enhances an application level service in a transparent manner.

27 (New). A policy management arrangement as in claim 1 further comprising an arrangement that modifies behavior of a particular application(s) based on a number of parameters including network point of attachment.

28 (New). A policy management arrangement as in claim 1 further comprising an arrangement that modifies behavior of a particular application(s) based on parameters including trust relationship.

29 (New). A network computing environment comprising:
a plurality of networks or subnetworks;

at least one software component that consumes at least one computing resource via at least one of said plurality of networks or subnetworks;

at least one mobile computing device coupled to at least one of said plurality of networks or subnetworks; and

a policy management system operating on at least another computing device that is coupled to at least one of said networks or subnetworks,

said mobile computing device cooperating with said policy management system to dynamically manage at least one of: (a) access by said mobile computing device to the resource, and (b) consumption by said mobile computing device of the resource, the resource at least in part available through said networks or subnetworks as said mobile computing device roams between said networks or subnetworks, even if communications to the resource is secure.

30 (New). The network computing environment of claim 29 wherein said mobile computing device accesses said network or subnetwork wirelessly.

31 (New). The network computing environment of claim 29 wherein dynamically managing includes dynamically controlling.

32 (New). The network computing environment of claim 29 wherein said another computing device acts as a proxy for said mobile computing device.

33 (New). The network computing environment of claim 29 wherein said mobile computing device and said policy management system cooperate to manage at least one of access to and consumption of the resource on a per user basis.

34 (New). The network computing environment of claim 29 wherein said mobile computing device and said policy management system cooperate to manage at least one of access to and consumption of the resource on a per device basis.

35 (New). The network computing environment of claim 29 wherein said mobile computing device and said policy management system cooperate to manage at least one of access to and consumption of the resource on both a per user basis and a per device basis.

36 (New). The network computing environment of claim 29 wherein said mobile computing device and said policy management system cooperate to enhance an application-level service in a transparent manner.

37 (New). The network computing environment of claim 29 wherein said another computing device and said mobile computing device cooperate to provide policy decision-making based on at least a cost metric.

38 (New). The network computing environment of claim 37 wherein said environment is multi-home/multi-path, and said cost metric comprises least cost routing.

39 (New). The network computing environment of claim 29 wherein said policy management system and said mobile computing device cooperate to enforce policy management rules based at least in part on locale of the mobile computing device.

40 (New). The network computing environment of claim 39 wherein the locale comprises proximity to a network point of attachment(s).

41 (New). The network computing environment of claim 39 wherein the locale comprises proximity to an access point(s)/base station(s)

42 (New). The network computing environment of claim 39 wherein the locale comprises proximity to a network hub(s).

43 (New). The network computing environment of claim 39 wherein the locale comprises proximity to a router(s).

44 (New). The network computing environment of claim 39 wherein the locale comprises a GPS coordinate(s).

45 (New). The network computing environment of claim 29 wherein said policy management system and said mobile computing device cooperate to allow certain operations in one area of an enterprise but not in another area of said enterprise.

46 (New). The network computing environment of claim 29 wherein at least one of said another computing device and said mobile computing device is limited by the policy management system such that said application(s) operating on the mobile computing device is allowed access to or consume services of less than all of said plurality of networks or subnetworks.

47 (New). The network computing environment of claim 29 wherein said environment comprises an enterprise having a loading dock area and an office area served by at least one wireless network, and said policy management system cooperating with said mobile computing device does not permit said mobile computing device to access the office environment via said wireless network.

48 (New). The network computing environment of claim 29 wherein said policy management system and said mobile computing device cooperate to govern the rate at which an application's operations/transactions are completed.

49 (New). The network computing environment of claim 48 wherein said policy management system learns the governing dynamically.

50 (New). The network computing environment of claim 29 wherein said policy management system allows for other actions to be invoked based on rule evaluation.

51 (New). The network computing environment of claim 29 wherein said policy management system logs events.

52 (New). The network computing environment of claim 29 wherein said policy management system sends alerts.

53 (New). The network computing environment of claim 29 wherein said policy management system notifies users that an action is being denied, delayed, or conditioned.

54 (New). The network computing environment of claim 29 wherein said policy management system interactively notifies users.

55 (New). The network computing environment of claim 29 wherein said policy management system allows an operator to override existing rules.

56 (New). The network computing environment of claim 29 wherein said policy management system acquires other locale base information and services for policy management.

57 (New). The network computing environment of claim 29 wherein said policy management system acquires other locale base information and services for network modeling.

58 (New). The network computing environment of claim 29 wherein said policy management system acquires other locale base information and services for asset tracking.

59 (New). The network computing environment of claim 29 wherein said policy management system automatically presents information applicable within context of a mobile computing device present location.

60 (New). The network computing environment of claim 59 wherein said information comprises a message.

61 (New). The network computing environment of claim 59 wherein said information comprises a file.

62 (New). The network computing environment of claim 59 wherein the information comprises an electronic format.

63 (New). The network computing environment of claim 59 wherein the information comprises current sales, discounts, and services.

64 (New). The network computing environment of claim 59 wherein the information comprises electronic coupons used for sales promotion.

65 (New). The network computing environment of claim 29 wherein said environment provides seamless connectivity for said mobile computing device while switching network mediums or point of attachments

66 (New). The network computing environment of claim 29 wherein said policy management system comprises a rules engine that applies at least one rule.

67 (New). The network computing environment of claim 66 wherein said rule comprises a learned rule.

68 (New). The network computing environment of claim 66 wherein said rule comprises a statically defined rule.

69 (New). The network computing environment of claim 29 wherein said policy management system applies a rule based on at least one of a user, a user group, a device, a device group, a process, an application identity a network point of attachment.

70 (New). The network computing environment of claim 29 wherein said policy management system uses a distributed architecture to apply or share the same decision set.

71 (New). The network computing environment of claim 29 wherein said policy management system performs the policy management processing and/or decision to accommodate limited processing power of the mobile computing device

72 (New). The network computing environment of claim 29 wherein said policy management system performs policy management processing and/or decision to

accommodate bandwidth limitations of the current network(s) or subnetwork(s) the mobile computing device has access to.

73 (New). The network computing environment of claim 29 wherein said policy management system performs policy management processing and/or decision making to accommodate security considerations of the mobile computing device.

74 (New). The network computing environment of claim 29 wherein said policy management system defines and populates a policy table.

75 (New). The network computing environment of claim 74 wherein said policy management system statically populates the policy table .

76 (New). The network computing environment of claim 74 wherein said policy management system dynamically populates the policy table.

77 (New). The network computing environment of claim 29 wherein said policy management system updates policy anytime before establishing a connection.

78 (New). The network computing environment of claim 29 wherein said policy management system updates policy anytime while establishing a connection.

79 (New). The network computing environment of claim 29 wherein said policy management system updates policy anytime after establishing a connection.

80 (New). The network computing environment of claim 29 wherein said policy management system dynamically manages and/or controls at least one of access to and consumption of the resource even while the mobile computing device is unreachable.

81 (New). The network computing environment of claim 29 wherein said policy management system dynamically manages and/or controls at least one of access to and consumption of the resource even while the mobile computing device is unable to send IP datagrams over any network or subnetwork.

82 (New). In a wireless connectivity environment comprising roaming at least one mobile computing device within a network environment comprising a plurality of networks or subnetworks, and executing, on said at least one mobile computing device, at least one software component that at least one of accesses and consumes at least one computing resource via at least one of said plurality of networks or subnetworks, a policy management method comprising at least in part through cooperation involving said mobile computing device, dynamically managing at least one of: (a) access by said mobile computing device to said resource, and (b) consumption by said mobile computing device of said resource, as said mobile computing device roams, even if communications to the resource is secure.

83 (New). The method of claim 82 wherein said mobile computing device wirelessly accesses said plural networks or subnetworks.

84 (New). The method of claim 82 wherein said dynamically managing comprises dynamically controlling.

85 (New). The method of claim 82 further including using another computing device to proxy said mobile computing device.

86 (New). The method of claim 82 further including cooperating with said mobile computing device to manage at least one of access to and consumption of the resource on a per user basis.

87 (New). The method of claim 82 further including cooperating with the mobile computing device to manage at least one of access to and consumption of the resource on a per device basis.

88 (New). The method of claim 82 further including providing policy decision-making based on a cost metric.

89 (New). The method of claim 82 further including providing least cost routing within a multi-home/multi-path environment.

90 (New). The method of claim 82 further including enforcing policy management rules based at least in part on locale of the mobile computing device.

91 (New). The method of claim 82 further including allowing certain operations in one area of an enterprise but not in another area of said enterprise.

92 (New). The method of claim 82 further including allowing said mobile computing device to access or consume services of less than all of said plurality of networks and subnetworks.

93 (New). The method of claim 82 further including governing the rate at which an application's operations/transactions are completed.

94 (New). The method of claim 82 further including notifying users that an action is being denied, delayed, or conditioned.

95 (New). The method of claim 82 further including allowing an operator to override predetermined policy rules.

96 (New). The method of claim 82 further including acquiring other locale base information and services for policy management.

97 (New). The method of claim 82 further including automatically presenting information applicable within the context of a mobile computing device present location.

98 (New). The method of claim 82 further including providing seamless connectivity for said mobile computing device while switching network mediums or point of attachments.

99 (New). The method of claim 82 further including configuring rules based on at least one of a user, a user group, a device, a device group, a process, an application identity, a network point of attachment.

100 (New). The method of claim 82 further including sharing a policy decision set within a distributed architecture.

101 (New). The method of claim 82 further including performing policy management processing and/or decisionmaking to accommodate limited processing power of the mobile computing device

102 (New). The method of claim 82 further including performing policy management processing and/or decisionmaking to accommodate bandwidth limitations of the current network(s) or subnetwork(s) that the mobile computing device is current associated with.

103 (New). The method of claim 82 further including performing policy management processing and/or decisionmaking to accommodate security purposes of the mobile computing device.

104 (New). The method of claim 82 further including dynamically managing and/or controlling at least one of access to and consumption of at least one computing resource even while the mobile computing device is unreachable.

105 (New). The method of claim 82 further including dynamically managing and/or controlling at least one of access to and consumption of at least one computing resource even while the mobile computing device is unable to send IP datagrams over any network or subnetwork.